

laminated film. The film to be laminated is located on roller 10, and this film is transported to the applicator unit 20, where the laminating adhesive is applied by means of appropriate application technologies, such as smooth roller application, gridded roller application, or brushed application. After application of the laminating adhesive, the coated film is transported to the drying tunnel 30. Located at the end of the drying tunnel is a supply roll device with another film 40; the two films are bonded together in the laminating station 50. Next, this laminated film is reeled by an appropriate device 60 and the adhesive is cured. When needed, the incoming film is coated with a thermally activated substance.

In The Claims:

Please cancel claims 1-24.

Please add new claims 25-45 to read as follows:

25. (New) A halogen-free composite film comprising at least one to N sealable, multi-layered laminated film(s), wherein N is an integer from 2 to 10, and in which a functional element is interposed between the individual laminated films.

26. (New) A composite film according to claim 25 wherein the functional element is a printed circuit board, a sensor, a metallic stranded wire, a metallic conductor material, or an electronic component.

27. (New) A composite film according to claim 25 wherein the sealable, multi-layered laminated films each comprise a first film, a laminating adhesive or lacquer, and a second film.

28. (New) A composite film according to claim 25 wherein each of the sealable, multi-layered laminated films are identical to one another.

29. (New) A composite film according to claim 27 wherein the second film of each laminated film comprises a thermally activated substance.

30. (New) A composite film according to claim 27 wherein the first and the second film of the individual laminated films are selected from the group consisting of: liquid crystal polymer, polyphenylene sulfide, polyethylene terephthalate, polyethylene naphthalate, polyketone, polyetherketone, polyetheretherketone, polyetherketoneketone, polyetheretherketoneketone, polyetherimide, polyether sul-fone, polysulfone, cyclo-olefin copolymer, and polyamide films.

31. (New) A composite film according to claim 27 wherein the laminating adhesive or lacquer is selected from the group consisting of: acrylates, polyurethanes, polyester polyols, polyester urethanes, epoxides, copolyesters or

natural adhesive resins, which can be used as single-component or multi-component systems.

32. (New) A composite film according to claim 30 wherein the laminating adhesive or lacquer is selected from the group consisting of: acrylates, polyurethanes, polyester polyols, polyester urethanes, epoxides, copolyesters or natural adhesive resins, which can be used as single-component or multi-component systems.

33. (New) A composite film according to claim 27 wherein the wet application weight of the laminating adhesive is 2 g/m² to 40 g/m².

34. (New) A composite film according to claim 29 wherein the thermally activated substance is selected from the group consisting of: cyclo-olefin copolymers, polyesters, polyurethanes, acrylates and derivatives thereof, vinyl acetate copolymers, polyvinyl alcohols, polyvinyl butyrals, polyvinyl acetates, sealable maleic resins, alkyd resins, polyolefins, polyamides and saturated, unsaturated, linear and/or branched copolyesters or multi-component polyurethane primer systems.

35. (New) A composite film according to claim 27 wherein the first and second films of the individual laminated films each have a thickness between 10 µm and 100 µm.

36. (New) A method for manufacturing a halogen-free composite film comprising:

applying a laminating adhesive to a first film of a first laminated film;

thereafter drying the first film in a drying tunnel at temperatures from approximately 80° C to 180° C;

joining a second film at the end of the drying tunnel to the first film to produce said first laminated film;

curing said laminating adhesive of said first laminated film;

providing a functional element between said first laminated film and a second laminated film produced in the same way as said first laminated film; and

laminating said first and second laminating films together.

37. (New) A method according to claim 36 wherein the composite film comprises at least one to N sealable, multi-layered laminated films, wherein N is an integer from ~~2 to 10~~.

38. (New) A method according to claim 36 further comprising coating the second film with a thermally activated substance.

39. (New) A method according to claim 36 wherein the first and the second film of the individual laminated films are selected from the group consisting of: liquid crystal polymer, polyphenylene sulfide, polyethylene

terephthalate, polyethylene naphthalate, polyketone, polyetherketone, polyetheretherketone, polyetherketoneketone, polyetheretherketoneketone, polyetherimide, polyether sulfone, polysulfone, cyclo-olefin copolymer, and polyamide films.

40. (New) A method according to claim 36 wherein the laminating adhesive is selected from the group consisting of: acrylates, polyurethanes, polyester polyols, polyester urethanes, epoxides, copolyesters or natural adhesive resins, which are used as single-component or multi-component systems.

41. (New) A method according to claim 36 wherein the laminating adhesive is applied wet and the wet application weight of the laminating adhesive is 2 g/m² to 40 g/m².

42. (New) A method according to claim 38 wherein the thermally activated substance is selected from the group consisting of: cyclo-olefin copolymers, polyesters, polyurethanes, acrylates and their derivatives, vinyl acetate copolymers, polyvinyl alcohols, polyvinyl butyrals, polyvinyl acetates, sealable maleic resins, alkyd resins, polyolefins, polyamides and saturated, unsaturated, linear and/or branched copolyesters or multi-component polyurethane primer systems.

43. (New) A method according to claim 36 wherein the first and second films of the individual laminated films each have a thickness between 10 μm and 100 μm .

44. (New) A method according to claim 36 wherein said functional element is an electrically conductive layer, and comprising vacuum depositing a metal layer between the first and second films or on the finished composite film.

45. (New) A method according to claim 44 wherein the vacuum deposited metal layer is copper or aluminum.

In The Abstract:

On page 23 of the English language translation of the German PCT Application, please amend the abstract to appear as follows:

The invention relates to a halogen-free composite film including at least one to N sealable, multi-layered composite film(s), wherein N is an integer from 2 to 10, and in which a functional layer and/or a functional element is interposed between the individual composite films. In addition, the invention relates to a method for manufacturing the halogen-free composite film and its use as a flexible, multi-purpose material.